

COVID-19 morbidity and mortality by race, ethnicity and spoken language in Washington state

Washington State Department of Health

May 03, 2022



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NOTE: Beginning the week of December 23, 2020, probable cases are included in the metrics calculated for morbidity and mortality associated with race, ethnicity, and spoken language. Probable cases are individuals with a positive antigen test for COVID-19. Also, as of December 16, 2020, probable cases are included in all case, hospitalization, and death counts on the Washington State Department of Health COVID-19 dashboard. Probable cases since June 2020, when the first antigen results were reported in Washington, are now included in the dashboard. This places the report on “COVID-19 Morbidity and Mortality by Race, Ethnicity and Spoken Language in Washington State” in alignment with the Washington State Department of Health COVID-19 Data Dashboard.

Overview

The impacts of COVID-19 morbidity and mortality have not been felt equally by all populations in Washington state. The pandemic has exacerbated the underlying and persistent inequities among historically marginalized communities and those disproportionately impacted due to structural racism and other forms of systemic oppression. This report provides an overview of confirmed or probable COVID-19 case, hospitalization, and death rates by race and ethnicity at state and regional levels. It also provides counts and percentages of confirmed or probable cases and hospitalizations by primary language spoken. Throughout this report, the COVID-19 case definition includes both molecular testing and antigen testing. Molecular positive cases are considered confirmed cases and antigen positive cases are considered probable cases. All hospitalization, death, and testing data reported here are based on positive molecular or antigen test results.

All rates presented in this report are adjusted for age using the Washington state population distribution based on the Office of Financial Management’s (OFM) April 1, 2020 population estimates by age, sex, race, and Hispanic origin. The rate calculations are for the population groups available from OFM for the Washington state population and follow Department of Health guidelines. Hispanic ethnicity was assigned first, regardless of race, and then racial groups were identified for those identifying as non-Hispanic. Based on this, the current report includes the following groups:

- Hispanic; and

- non-Hispanic race categorizations for white, Black, Native Hawaiian and Pacific Islander, Asian, and American Indian/Alaska Native.

While this allows assessment of data by race and ethnicity groups, this categorization is incomplete and does not reflect the diversity of people and experiences across the state. Additionally, there is a significant lack of race and ethnicity reporting for confirmed or probable COVID-19 cases and hospitalizations (about 28% missing) and for deaths (about 0% missing). Primary language spoken is missing for about 75% of cases and hospitalizations. Age information is missing for a small percentage of confirmed or probable cases (about 0.1%), and these cases are not included in age-adjusted rates. The lack of data limits our ability to draw firm conclusions; however, there are some concerning patterns reported below.

Cumulative age-adjusted confirmed or probable COVID-19 case, hospitalization, and death rates by race and ethnicity per 100,000 population

The table and figures below describe the counts and age-adjusted rates per 100,000 population in Washington by race and ethnicity for confirmed or probable cases, hospitalizations, and deaths for the entire time period from the start of the pandemic through 2022-05-02 based on the specimen collection date. 95% confidence intervals are included in the charts.

The data show that communities of color are disproportionately impacted by COVID-19 in significant ways, including the following.

COVID-19 confirmed or probable case rates

- Native Hawaiian and Pacific Islander (NHPI) and Hispanic populations have the highest age-adjusted confirmed or probable case rates while Asian and multiracial populations have the lowest case rates.
- Confirmed or probable case rates for NHPI and Hispanic populations are approximately three times higher than case rates for Asian and multiracial populations.
- Confirmed or probable case rates for Black populations are approximately two times higher than case rates among Asian and multiracial populations.

COVID-19 hospitalization rates among confirmed or probable cases

- Hospitalization rates among confirmed or probable COVID-19 cases are the highest for NHPI populations and lowest for multiracial populations.
- NHPI hospitalization rates among confirmed or probable COVID-19 cases are six times higher than white populations.
- Hispanic hospitalization rates among confirmed or probable COVID-19 cases are two times higher than white populations.
- Hospitalization rates among confirmed or probable COVID-19 cases for Black and American Indian and Alaska Native (AIAN) populations are two times higher compared to white populations.

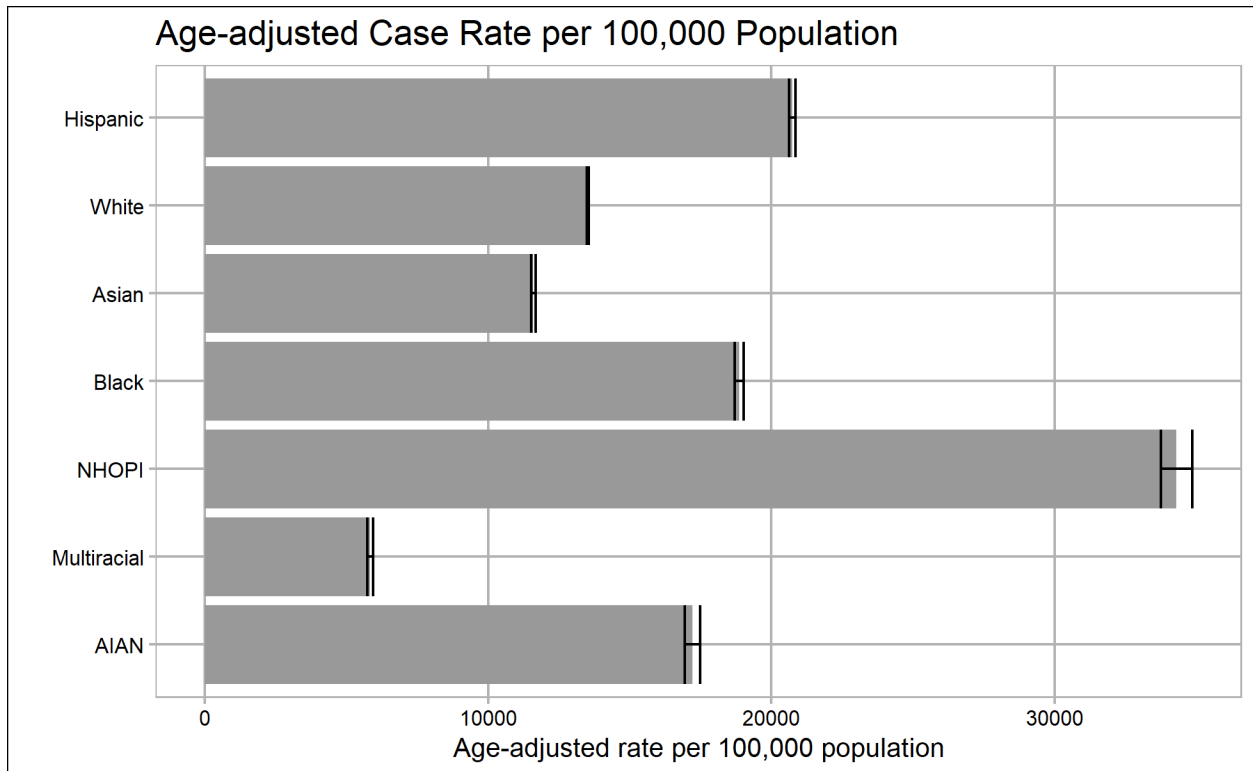
COVID-19 death rates among confirmed or probable cases

- Asian populations have the lowest death rates among confirmed or probable COVID-19 cases of all race/ethnicity groups.
- NHPI populations have death rates among confirmed or probable COVID-19 cases that are approximately five times higher than white and Asian populations.
- AIAN and Hispanic populations have death rates among confirmed or probable COVID-19 cases that are approximately three times higher than Asian populations.
- Black populations have death rates among confirmed or probable COVID-19 cases that are about twice as high as white populations.

Table 1. Confirmed or probable COVID-19 case, hospitalization, and death count and age-adjusted rates by race/ethnicity

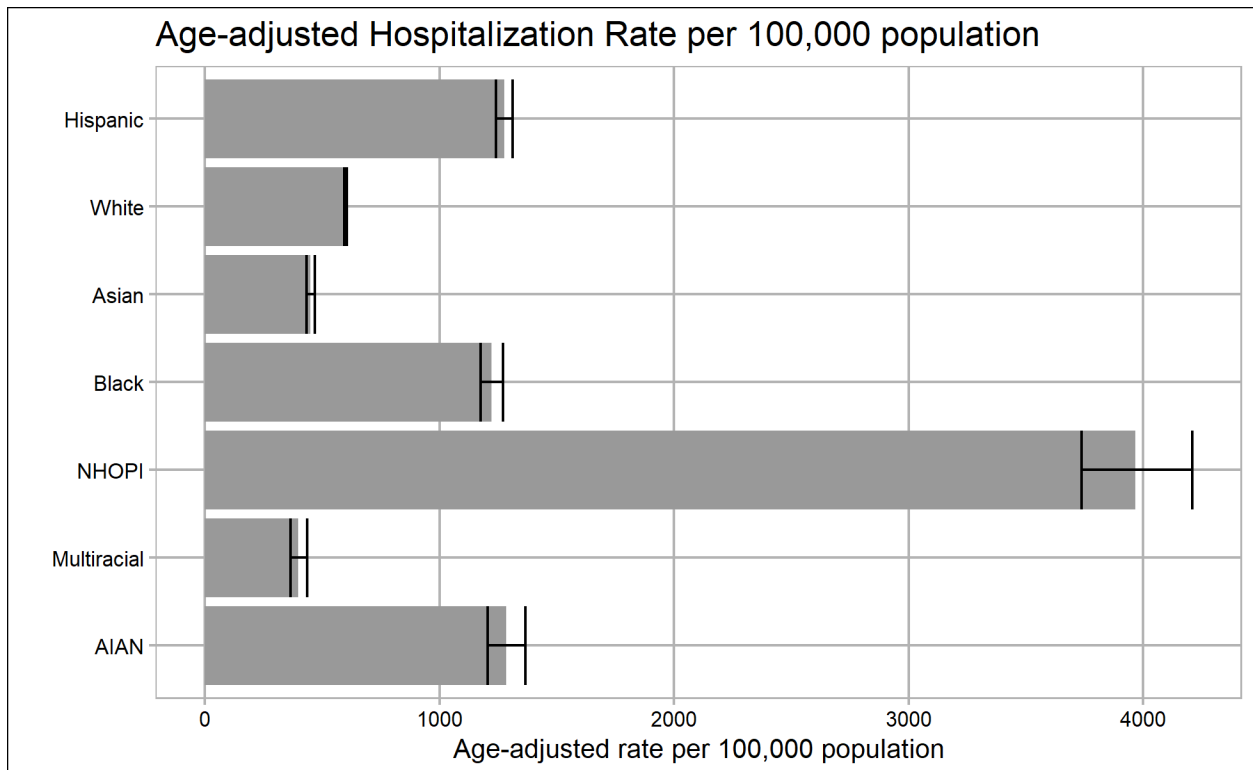
Race/Ethnicity	Case Count	Age-Adjusted Case Rate per 100,000	Hospitalization Count	Age-Adjusted Hospitalization Rate per 100,000	Death Count	Age-Adjusted Death Rate per 100,000
All Races	1,504,371	19649.1	60,522	790.5	12,708	166.0
Unknown	418,574		8,713		32	
Hispanic	209,096	20734.0	7,018	1275.2	1,233	357.3
White	667,388	13522.2	35,414	599.4	9,425	146.7
Asian	86,575	11590.3	2,690	450.5	707	140.9
Black	59,843	18865.7	2,935	1222.4	445	244.1
NHPI	19,457	34306.8	1,496	3966.8	213	794.2
Multiracial	17,842	5823.0	613	397.5	190	162.3
AIAN	16,571	17210.1	1,061	1283.1	281	402.0
Other	9,025		582		174	

The following graph indicates the age-adjusted confirmed or probable COVID-19 case rate per 100,000 population by race/ethnicity during the time period 2020-01-17 to 2022-05-02



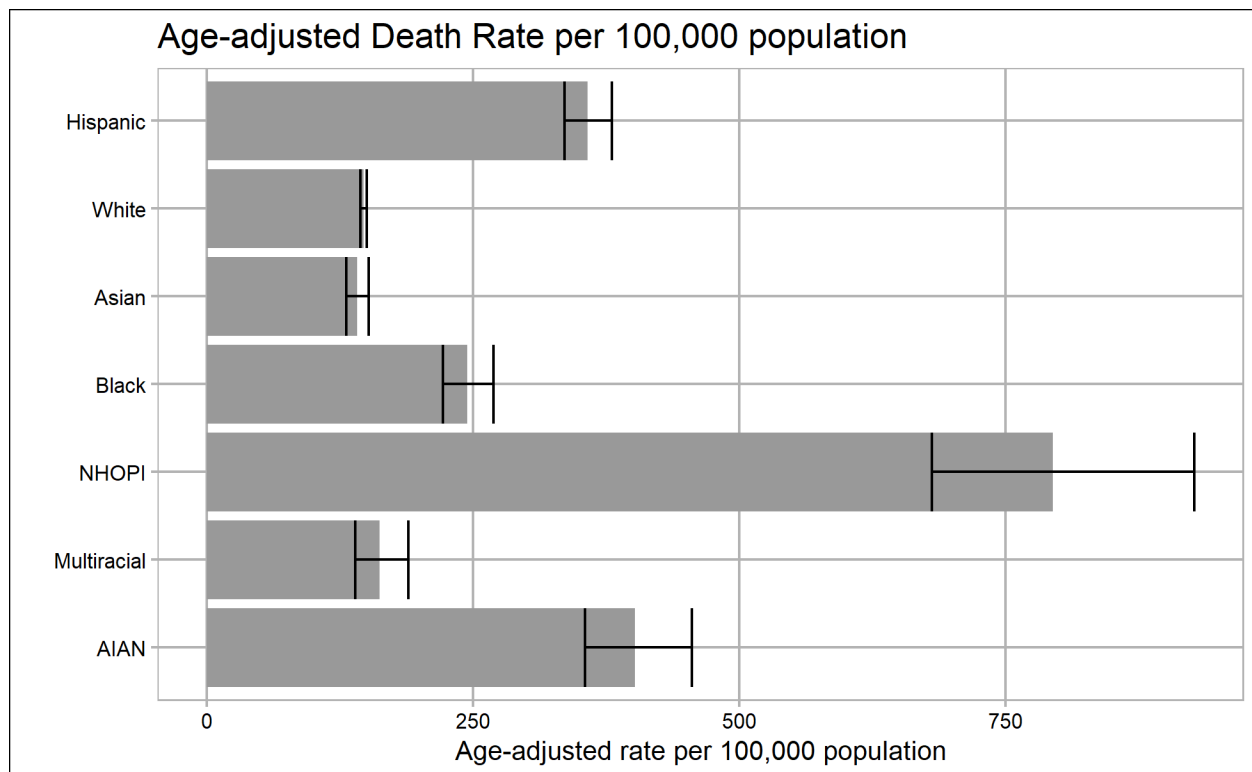
Source: Washington Disease Reporting System (WDRS)

The following graph indicates the age-adjusted hospitalization rate among confirmed or probable COVID-19 cases per 100,000 population by race/ethnicity during the time period 2020-01-17 to 2022-05-02



Source: Washington Disease Reporting System (WDRS)

The following graph indicates the age-adjusted death rate among confirmed or probable COVID-19 cases per 100,000 population by race/ethnicity during the time period 2020-01-17 to 2022-05-02



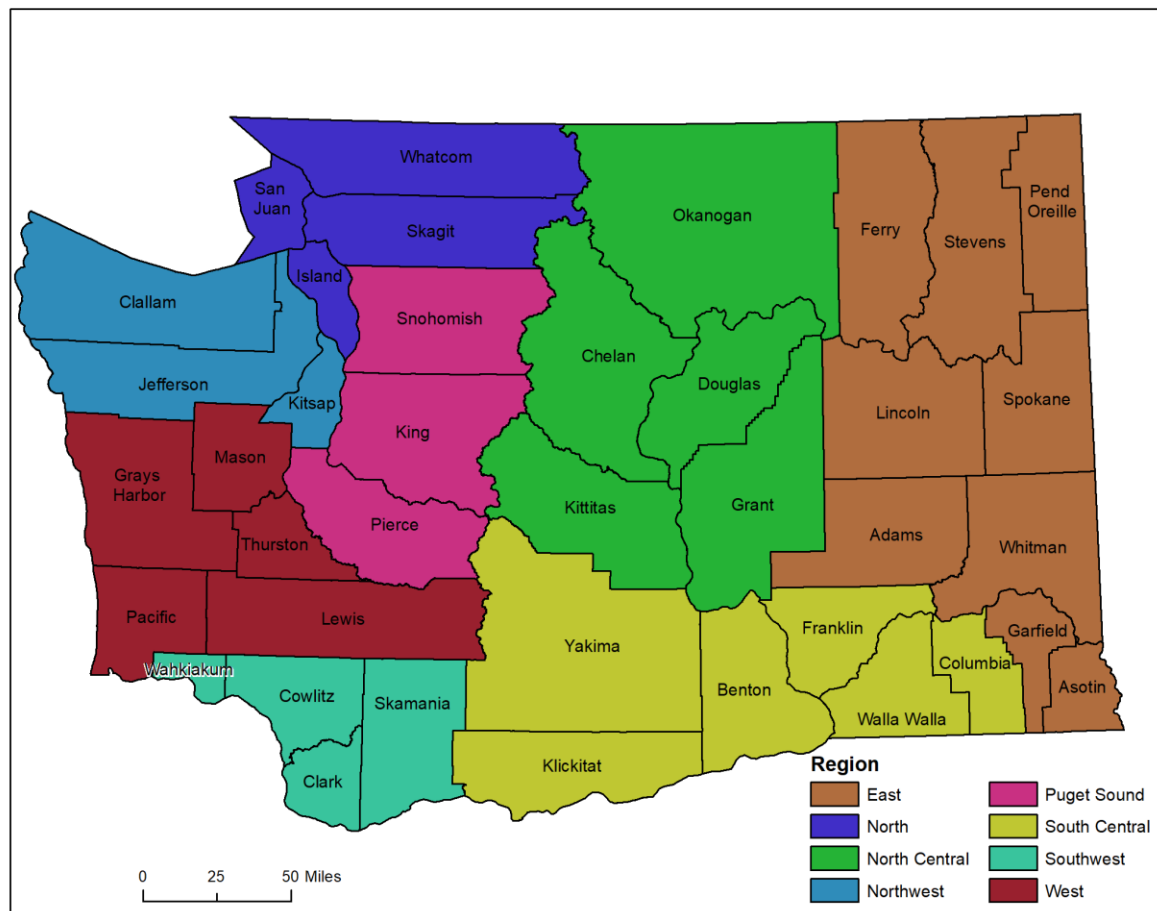
Source: Electronic Death Registration System (EDRS) and Washington Health and Life Events System (WHALES)

Analysis of confirmed or probable COVID-19 cases, hospitalizations, and deaths by geographic region

Regional groupings of Washington state counties

Some counties may not have sufficient case counts to analyze trends by race and ethnicity. In order to incorporate data from counties of all sizes, counties were assigned into one of 8 analytic regions (see Map of Washington Counties and Analysis Regions below). The regions presented were developed by the Washington State Department of Health in order to better understand geographic differences in disease spread and how disease spread may be changing over time. While infection rates may not be the same within any given region, this regional grouping allows for more specific geographic analyses without excluding any counties or communities due to concerns about smaller numbers.

Map of Washington counties by DOH analysis regions



Missing race/ethnicity data by region

The North region has the highest percentage of missing race/ethnicity data among confirmed or probable COVID-19 cases and the North Central and Puget Sound regions have the lowest percentage of missing data on race/ethnicity, as indicated in the following table. The total number of confirmed or probable cases, and the number and percentage of confirmed or probable cases with missing data are shown in Table 2.

Table 2. Counts and percentage of confirmed or probable COVID-19 cases with unknown race/ethnicity by DOH analytic region.

Region	Case Count	Cases with Unknown Race/Ethnicity	% Cases with Unknown Race/Ethnicity
East	158,274	42,564	27%
North	72,824	28,251	39%

Region	Case Count	Cases with Unknown Race/Ethnicity	% Cases with Unknown Race/Ethnicity
North Central	74,414	16,486	22%
Northwest	55,318	19,842	36%
Puget Sound	750,334	190,759	25%
South Central	177,146	51,941	29%
Southwest	115,327	41,845	36%
West	98,479	25,275	26%
Unknown	3,283	2,215	67%

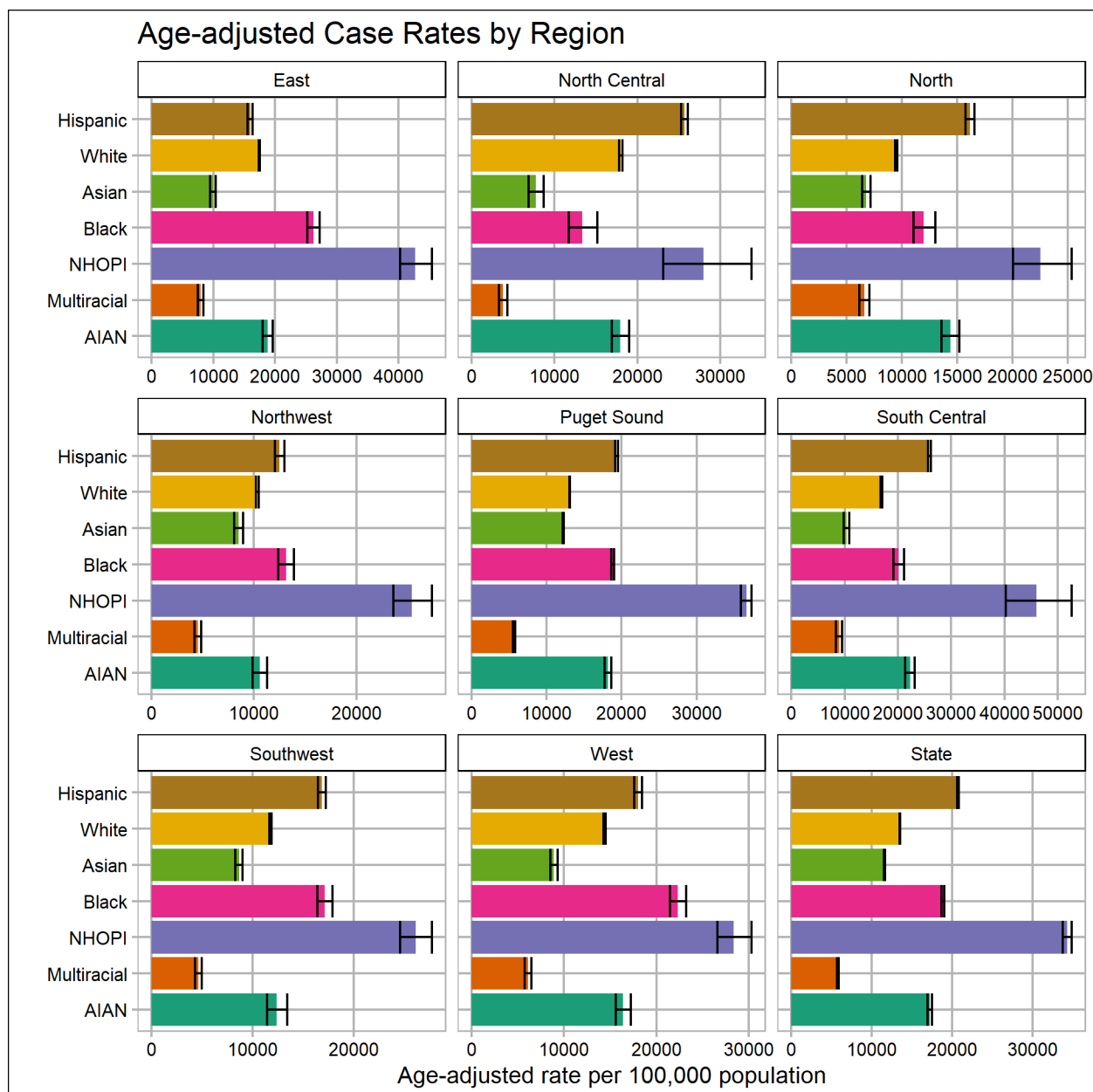
*Source: Washington Disease Reporting System (WDRS)
Includes data from 2020-01-17 to 2022-05-02*

Cumulative age-adjusted confirmed or probable COVID-19 case rates by race, ethnicity, and analytic region

The following figures describe the age-adjusted confirmed or probable COVID-19 case rates per 100,000 population by race/ethnicity and region. They were calculated using the confirmed or probable cases with known race/ethnicity (about 72% of all reported cases).

It is important to note that the numeric scale differs across regions, so use caution when comparing two or more regions, as their scales may differ. The last figure (lower right corner) presents the age-adjusted confirmed or probable COVID-19 case rates for the whole state.

These data indicate that COVID-19 is found in significant numbers across racial and ethnic groups throughout the state, and it is not confined to certain areas, such as rural, urban, or suburban regions. Population centers in Puget Sound contribute substantially to the counts. However less populated regions, like South Central Washington, show larger rate differences by race/ethnicity, although they have smaller populations of racial and ethnic minorities. Further, while extreme disparities exist, people of all races and ethnicities are impacted.

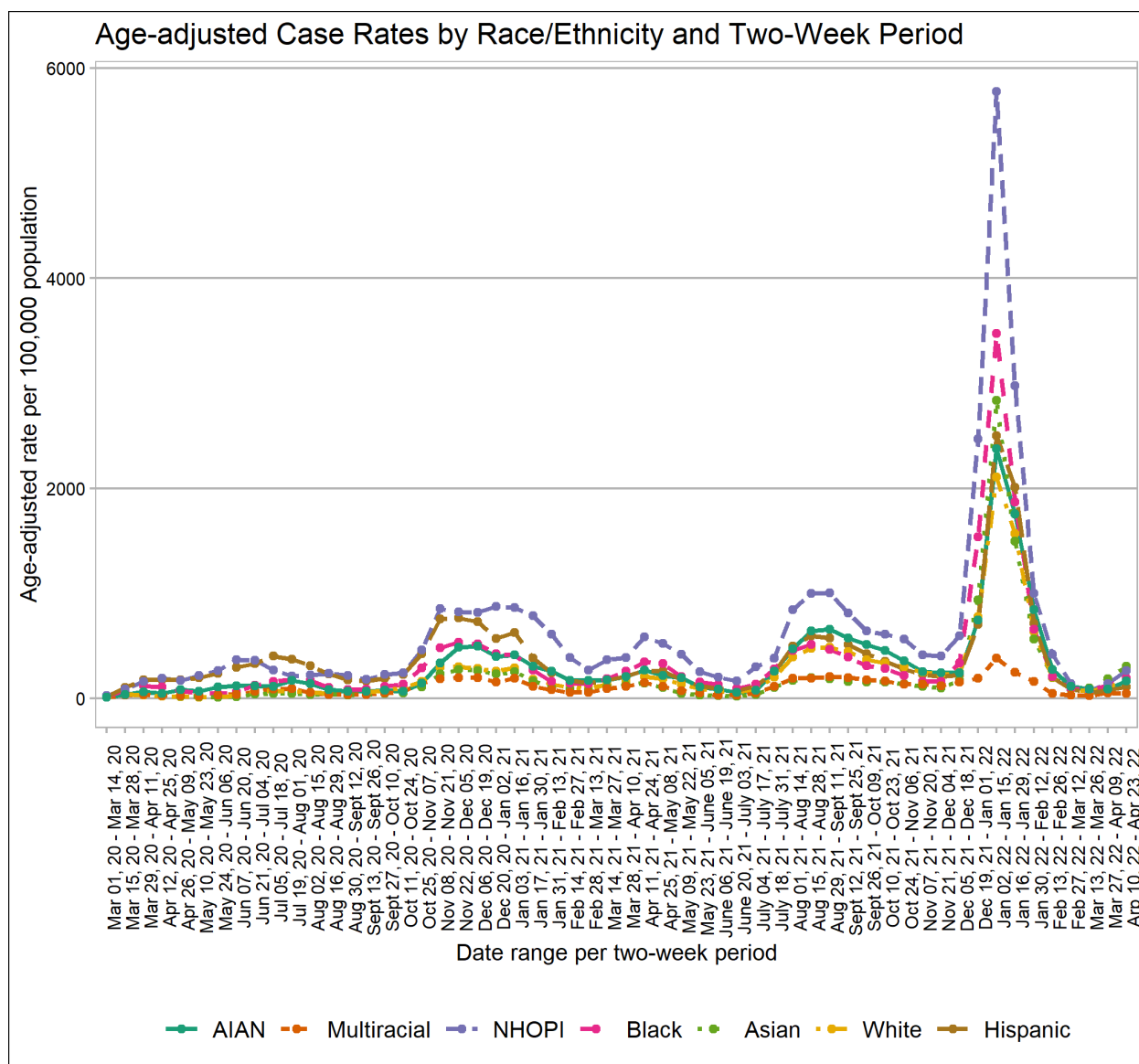


Source: Washington Disease Reporting System (WDRS)

Includes data from 2020-01-17 to 2022-05-02

Age-adjusted confirmed or probable COVID-19 case rates by race and ethnicity per two-week period (Mar 2020-April* 2022)

*February 2022 data include all confirmed or probable cases with a specimen collection date through 2022-04-23 to include the most recent, complete two-week period of data collection.



Confirmed or probable COVID-19 case rates, adjusted for age by race and ethnicity, were calculated to better understand how race- and ethnicity-specific patterns may be changing over time by two-week period. Race/ethnicity-specific counts and age-adjusted rates increased for all race/ethnicity groups through July and early August 2020. All groups declined from early August to mid/late-August and flattened through September 2020. All race/ethnicity-age-adjusted rates began to rapidly increase in mid-October through the end of November. Rates of confirmed or probable cases remain highest for Hispanic and NHPI population, and higher Black and AIAN populations in comparison to white, Asian, and multiracial populations.

Table 3. Age-adjusted confirmed or probable COVID-19 case rates by race and ethnicity per two-week period (Mar 1, 2020 - Apr 23, 2022)

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Hispanic	Mar 01, 20-Mar 14, 20	107	15.1	12.1	18.8
	Mar 15, 20-Mar 28, 20	704	103.3	94.7	112.7
	Mar 29, 20-Apr 11, 20	1,215	175.7	164.3	187.9
	Apr 12, 20-Apr 25, 20	1,372	176.8	166.0	188.3
	Apr 26, 20-May 09, 20	1,474	177.6	167.1	188.7
	May 10, 20-May 23, 20	1,711	195.6	184.9	206.8
	May 24, 20-Jun 06, 20	2,003	237.1	224.9	250.0
	Jun 07, 20-Jun 20, 20	2,498	293.5	279.9	307.7
	Jun 21, 20-Jul 04, 20	2,926	329.3	315.0	344.1
	Jul 05, 20-Jul 18, 20	3,785	403.1	388.1	418.7
	Jul 19, 20-Aug 01, 20	3,474	373.4	358.8	388.6
	Aug 02, 20-Aug 15, 20	2,821	307.8	294.4	321.7
	Aug 16, 20-Aug 29, 20	2,161	233.5	221.9	245.6
	Aug 30, 20-Sept 12, 20	1,643	176.7	166.7	187.3
	Sept 13, 20-Sept 26, 20	1,519	166.6	156.8	177.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Sept 27, 20-Oct 10, 20	1,817	191.2	181.0	202.0
	Oct 11, 20-Oct 24, 20	2,152	225.8	214.8	237.4
	Oct 25, 20-Nov 07, 20	4,101	423.8	408.6	439.6
	Nov 08, 20-Nov 21, 20	7,124	756.3	735.8	777.5
	Nov 22, 20-Dec 05, 20	7,311	766.9	746.2	788.1
	Dec 06, 20-Dec 19, 20	6,870	728.9	708.7	749.8
	Dec 20, 20-Jan 02, 21	5,294	567.3	549.3	585.9
	Jan 03, 21-Jan 16, 21	6,040	625.3	606.7	644.5
	Jan 17, 21-Jan 30, 21	3,523	380.7	365.7	396.3
	Jan 31, 21-Feb 13, 21	2,326	242.2	230.7	254.3
	Feb 14, 21-Feb 27, 21	1,685	172.5	162.9	182.6
	Feb 28, 21-Mar 13, 21	1,441	142.6	134.2	151.6
	Mar 14, 21-Mar 27, 21	1,768	169.0	160.0	178.5
	Mar 28, 21-Apr 10, 21	2,289	213.9	203.9	224.3
	Apr 11, 21-Apr 24, 21	2,873	267.4	256.3	279.0
	Apr 25, 21-May 08, 21	2,775	256.1	245.2	267.5

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 09, 21-May 22, 21	2,011	182.0	173.0	191.5
	May 23, 21-June 05, 21	1,277	118.8	111.4	126.8
	June 06, 21-June 19, 21	940	92.6	85.8	100.0
	June 20, 21-July 03, 21	752	74.2	68.1	81.0
	July 04, 21-July 17, 21	1,174	120.9	112.7	129.7
	July 18, 21-July 31, 21	2,676	255.3	244.2	266.9
	Aug 01, 21-Aug 14, 21	5,260	499.0	483.4	515.2
	Aug 15, 21-Aug 28, 21	6,131	595.6	578.1	613.6
	Aug 29, 21-Sept 11, 21	6,022	575.6	558.4	593.4
	Sept 12, 21-Sept 25, 21	5,501	512.8	496.8	529.4
	Sept 26, 21-Oct 09, 21	4,459	422.2	407.5	437.5
	Oct 10, 21-Oct 23, 21	3,605	349.4	335.9	363.4
	Oct 24, 21-Nov 06, 21	2,941	276.6	264.8	288.9
	Nov 07, 21-Nov 20, 21	2,402	229.4	218.6	240.8
	Nov 21, 21-Dec 04, 21	2,168	204.1	194.0	214.7
	Dec 05, 21-Dec 18, 21	2,416	220.3	210.0	231.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
White	Dec 19, 21-Jan 01, 22	7,422	705.8	687.3	724.9
	Jan 02, 22-Jan 15, 22	27,808	2,500.9	2,466.8	2,535.5
	Jan 16, 22-Jan 29, 22	22,082	2,005.7	1,974.5	2,037.5
	Jan 30, 22-Feb 12, 22	7,593	713.7	694.3	733.6
	Feb 13, 22-Feb 26, 22	1,964	198.0	187.3	209.2
	Feb 27, 22-Mar 12, 22	795	86.1	78.8	94.1
	Mar 13, 22-Mar 26, 22	466	50.0	44.6	56.0
	Mar 27, 22-Apr 09, 22	711	75.1	68.7	82.1
	Apr 10, 22-Apr 23, 22	1,020	107.1	99.3	115.4
	Mar 01, 20-Mar 14, 20	642	11.0	10.1	11.9
	Mar 15, 20-Mar 28, 20	2,393	42.4	40.7	44.1
	Mar 29, 20-Apr 11, 20	1,806	32.1	30.6	33.6
	Apr 12, 20-Apr 25, 20	1,044	18.3	17.2	19.5
	Apr 26, 20-May 09, 20	883	15.6	14.6	16.7
	May 10, 20-May 23, 20	602	10.9	10.0	11.8
	May 24, 20-Jun 06, 20	774	14.7	13.7	15.8

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jun 07, 20-Jun 20, 20	1,343	25.9	24.5	27.3
	Jun 21, 20-Jul 04, 20	2,924	59.2	57.1	61.4
	Jul 05, 20-Jul 18, 20	3,519	69.8	67.5	72.2
	Jul 19, 20-Aug 01, 20	3,518	68.6	66.3	70.9
	Aug 02, 20-Aug 15, 20	2,813	55.2	53.2	57.3
	Aug 16, 20-Aug 29, 20	2,223	44.1	42.3	46.0
	Aug 30, 20-Sept 12, 20	2,242	44.6	42.8	46.5
	Sept 13, 20-Sept 26, 20	2,797	55.0	53.0	57.1
	Sept 27, 20-Oct 10, 20	3,932	78.0	75.6	80.5
	Oct 11, 20-Oct 24, 20	4,907	96.2	93.6	99.0
	Oct 25, 20-Nov 07, 20	8,085	159.4	155.9	162.9
	Nov 08, 20-Nov 21, 20	14,939	294.7	290.0	299.6
	Nov 22, 20-Dec 05, 20	15,221	298.1	293.4	303.0
	Dec 06, 20-Dec 19, 20	14,638	285.7	281.0	290.4
	Dec 20, 20-Jan 02, 21	13,353	260.9	256.5	265.5
	Jan 03, 21-Jan 16, 21	14,638	289.7	285.0	294.5

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jan 17, 21-Jan 30, 21	9,230	182.7	179.0	186.6
	Jan 31, 21-Feb 13, 21	6,791	134.9	131.7	138.2
	Feb 14, 21-Feb 27, 21	5,226	104.6	101.7	107.5
	Feb 28, 21-Mar 13, 21	4,846	97.9	95.2	100.7
	Mar 14, 21-Mar 27, 21	6,373	129.9	126.7	133.2
	Mar 28, 21-Apr 10, 21	8,074	165.7	162.1	169.4
	Apr 11, 21-Apr 24, 21	10,031	205.8	201.7	209.9
	Apr 25, 21-May 08, 21	9,073	187.0	183.1	190.9
	May 09, 21-May 22, 21	6,534	133.8	130.5	137.1
	May 23, 21-June 05, 21	4,474	91.5	88.8	94.2
	June 06, 21-June 19, 21	3,110	62.6	60.4	64.8
	June 20, 21-July 03, 21	2,730	54.7	52.6	56.8
	July 04, 21-July 17, 21	4,471	90.7	88.1	93.5
	July 18, 21-July 31, 21	10,074	203.3	199.3	207.3
	Aug 01, 21-Aug 14, 21	19,395	392.4	386.9	398.1
	Aug 15, 21-Aug 28, 21	23,759	477.1	471.0	483.3

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Aug 29, 21-Sept 11, 21	23,973	483.7	477.5	489.9
	Sept 12, 21-Sept 25, 21	21,737	443.5	437.6	449.5
	Sept 26, 21-Oct 09, 21	17,921	365.4	360.0	370.8
	Oct 10, 21-Oct 23, 21	16,724	337.2	332.1	342.4
	Oct 24, 21-Nov 06, 21	14,845	299.2	294.3	304.1
	Nov 07, 21-Nov 20, 21	12,237	249.3	244.8	253.8
	Nov 21, 21-Dec 04, 21	10,985	224.0	219.8	228.3
	Dec 05, 21-Dec 18, 21	11,953	247.5	243.0	252.0
	Dec 19, 21-Jan 01, 22	37,731	775.9	768.1	783.9
	Jan 02, 22-Jan 15, 22	101,431	2,105.6	2,092.5	2,118.7
	Jan 16, 22-Jan 29, 22	75,696	1,566.7	1,555.4	1,578.0
	Jan 30, 22-Feb 12, 22	31,222	636.5	629.3	643.6
	Feb 13, 22-Feb 26, 22	9,915	197.6	193.7	201.6
	Feb 27, 22-Mar 12, 22	4,371	86.0	83.4	88.6
	Mar 13, 22-Mar 26, 22	3,479	68.8	66.5	71.2
	Mar 27, 22-Apr 09, 22	5,406	107.7	104.8	110.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Asian	Apr 10, 22-Apr 23, 22	8,360	165.0	161.5	168.6
	Mar 01, 20-Mar 14, 20	122	18.9	15.7	22.8
	Mar 15, 20-Mar 28, 20	306	43.9	39.1	49.3
	Mar 29, 20-Apr 11, 20	376	54.5	49.1	60.4
	Apr 12, 20-Apr 25, 20	269	39.5	34.9	44.7
	Apr 26, 20-May 09, 20	154	21.9	18.6	25.8
	May 10, 20-May 23, 20	122	17.4	14.4	20.9
	May 24, 20-Jun 06, 20	85	11.7	9.4	14.5
	Jun 07, 20-Jun 20, 20	116	16.1	13.4	19.5
	Jun 21, 20-Jul 04, 20	294	39.8	35.4	44.7
	Jul 05, 20-Jul 18, 20	328	44.4	39.7	49.6
	Jul 19, 20-Aug 01, 20	326	45.2	40.4	50.5
	Aug 02, 20-Aug 15, 20	279	37.8	33.6	42.7
	Aug 16, 20-Aug 29, 20	264	35.6	31.5	40.3
	Aug 30, 20-Sept 12, 20	214	29.5	25.7	33.9
	Sept 13, 20-Sept 26, 20	254	35.1	30.9	39.9

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Sept 27, 20-Oct 10, 20	354	46.8	42.1	52.0
	Oct 11, 20-Oct 24, 20	381	50.1	45.2	55.5
	Oct 25, 20-Nov 07, 20	816	109.9	102.5	117.9
	Nov 08, 20-Nov 21, 20	1,722	231.2	220.3	242.7
	Nov 22, 20-Dec 05, 20	1,991	272.5	260.4	285.0
	Dec 06, 20-Dec 19, 20	1,875	262.1	250.1	274.5
	Dec 20, 20-Jan 02, 21	1,703	233.3	222.3	245.0
	Jan 03, 21-Jan 16, 21	1,816	251.3	239.7	263.4
	Jan 17, 21-Jan 30, 21	1,166	163.0	153.6	172.8
	Jan 31, 21-Feb 13, 21	761	105.5	98.1	113.4
	Feb 14, 21-Feb 27, 21	604	82.8	76.3	89.8
	Feb 28, 21-Mar 13, 21	538	71.5	65.6	78.0
	Mar 14, 21-Mar 27, 21	801	107.1	99.8	115.0
	Mar 28, 21-Apr 10, 21	948	122.9	115.2	131.2
	Apr 11, 21-Apr 24, 21	1,102	143.6	135.2	152.5
	Apr 25, 21-May 08, 21	798	103.2	96.1	110.7

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 09, 21-May 22, 21	365	47.7	43.0	53.0
	May 23, 21-June 05, 21	233	31.5	27.6	35.9
	June 06, 21-June 19, 21	169	23.1	19.8	27.0
	June 20, 21-July 03, 21	148	19.4	16.4	22.8
	July 04, 21-July 17, 21	278	36.2	32.1	40.8
	July 18, 21-July 31, 21	772	102.0	95.0	109.6
	Aug 01, 21-Aug 14, 21	1,296	170.3	161.1	180.1
	Aug 15, 21-Aug 28, 21	1,448	193.7	183.8	204.1
	Aug 29, 21-Sept 11, 21	1,409	187.6	177.8	197.8
	Sept 12, 21-Sept 25, 21	1,206	162.0	152.9	171.6
	Sept 26, 21-Oct 09, 21	1,131	153.6	144.8	163.0
	Oct 10, 21-Oct 23, 21	1,135	155.2	146.3	164.7
	Oct 24, 21-Nov 06, 21	1,017	138.0	129.7	147.0
	Nov 07, 21-Nov 20, 21	827	112.8	105.2	120.9
	Nov 21, 21-Dec 04, 21	725	97.5	90.5	105.0
	Dec 05, 21-Dec 18, 21	1,303	172.7	163.4	182.5

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Black	Dec 19, 21-Jan 01, 22	7,234	937.4	915.7	959.6
	Jan 02, 22-Jan 15, 22	21,391	2,836.0	2,797.6	2,874.9
	Jan 16, 22-Jan 29, 22	11,112	1,497.5	1,469.4	1,526.1
	Jan 30, 22-Feb 12, 22	4,162	563.0	545.8	580.7
	Feb 13, 22-Feb 26, 22	1,496	200.9	190.8	211.6
	Feb 27, 22-Mar 12, 22	659	89.0	82.3	96.3
	Mar 13, 22-Mar 26, 22	747	100.2	93.2	107.9
	Mar 27, 22-Apr 09, 22	1,443	185.7	176.2	195.8
	Apr 10, 22-Apr 23, 22	2,310	305.7	293.2	318.7
	Mar 01, 20-Mar 14, 20	36	13.6	9.6	19.3
	Mar 15, 20-Mar 28, 20	213	76.8	66.6	88.5
	Mar 29, 20-Apr 11, 20	319	116.3	103.5	130.6
	Apr 12, 20-Apr 25, 20	312	106.6	94.9	119.6
	Apr 26, 20-May 09, 20	213	71.6	62.2	82.3
	May 10, 20-May 23, 20	160	51.6	43.9	60.6
	May 24, 20-Jun 06, 20	133	45.2	37.7	54.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jun 07, 20-Jun 20, 20	195	62.2	53.8	72.1
	Jun 21, 20-Jul 04, 20	387	121.4	109.4	134.7
	Jul 05, 20-Jul 18, 20	514	160.0	146.4	174.8
	Jul 19, 20-Aug 01, 20	566	183.1	168.1	199.5
	Aug 02, 20-Aug 15, 20	522	172.3	157.5	188.4
	Aug 16, 20-Aug 29, 20	324	104.6	93.4	117.1
	Aug 30, 20-Sept 12, 20	246	80.1	70.3	91.3
	Sept 13, 20-Sept 26, 20	277	89.8	79.3	101.6
	Sept 27, 20-Oct 10, 20	366	114.0	102.6	126.7
	Oct 11, 20-Oct 24, 20	427	135.9	123.1	150.0
	Oct 25, 20-Nov 07, 20	943	290.6	272.3	310.2
	Nov 08, 20-Nov 21, 20	1,518	481.4	457.0	507.1
	Nov 22, 20-Dec 05, 20	1,638	534.4	508.0	562.1
	Dec 06, 20-Dec 19, 20	1,559	519.0	492.7	546.8
	Dec 20, 20-Jan 02, 21	1,282	422.0	398.5	446.8
	Jan 03, 21-Jan 16, 21	1,284	412.3	389.5	436.4

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jan 17, 21-Jan 30, 21	827	269.8	251.3	289.6
	Jan 31, 21-Feb 13, 21	488	159.6	145.4	175.1
	Feb 14, 21-Feb 27, 21	438	142.8	129.5	157.5
	Feb 28, 21-Mar 13, 21	435	137.1	124.5	151.0
	Mar 14, 21-Mar 27, 21	597	187.1	172.3	203.2
	Mar 28, 21-Apr 10, 21	848	256.5	239.5	274.8
	Apr 11, 21-Apr 24, 21	1,141	347.6	327.5	368.8
	Apr 25, 21-May 08, 21	1,079	332.5	312.7	353.6
	May 09, 21-May 22, 21	673	207.0	191.6	223.6
	May 23, 21-June 05, 21	509	156.4	143.0	170.9
	June 06, 21-June 19, 21	404	126.4	114.2	139.8
	June 20, 21-July 03, 21	304	93.8	83.6	105.3
	July 04, 21-July 17, 21	452	134.4	122.4	147.5
	July 18, 21-July 31, 21	928	281.0	263.1	300.2
	Aug 01, 21-Aug 14, 21	1,485	457.0	433.8	481.4
	Aug 15, 21-Aug 28, 21	1,637	513.4	488.4	539.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Aug 29, 21-Sept 11, 21	1,465	465.5	441.5	490.9
	Sept 12, 21-Sept 25, 21	1,259	393.1	371.4	416.1
	Sept 26, 21-Oct 09, 21	996	308.6	289.5	329.0
	Oct 10, 21-Oct 23, 21	900	284.7	266.1	304.5
	Oct 24, 21-Nov 06, 21	683	215.0	199.0	232.3
	Nov 07, 21-Nov 20, 21	500	159.2	145.3	174.4
	Nov 21, 21-Dec 04, 21	526	160.9	147.4	175.5
	Dec 05, 21-Dec 18, 21	1,101	335.5	315.9	356.3
	Dec 19, 21-Jan 01, 22	5,013	1,537.5	1,494.5	1,581.7
	Jan 02, 22-Jan 15, 22	11,163	3,472.5	3,406.9	3,539.4
	Jan 16, 22-Jan 29, 22	5,944	1,869.7	1,821.4	1,919.4
	Jan 30, 22-Feb 12, 22	2,038	655.7	626.7	686.0
	Feb 13, 22-Feb 26, 22	623	206.3	189.9	224.1
	Feb 27, 22-Mar 12, 22	275	91.6	81.0	103.7
	Mar 13, 22-Mar 26, 22	250	81.6	71.7	93.0
	Mar 27, 22-Apr 09, 22	379	122.1	109.9	135.7

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
NHPI	Apr 10, 22-Apr 23, 22	595	190.3	175.0	206.9
	Mar 01, 20-Mar 14, 20	11	24.9	12.8	48.6
	Mar 15, 20-Mar 28, 20	35	89.0	59.3	133.7
	Mar 29, 20-Apr 11, 20	68	158.8	119.7	210.8
	Apr 12, 20-Apr 25, 20	102	192.4	155.9	237.3
	Apr 26, 20-May 09, 20	89	171.6	136.8	215.3
	May 10, 20-May 23, 20	119	216.2	177.6	263.1
	May 24, 20-Jun 06, 20	147	261.2	217.2	314.1
	Jun 07, 20-Jun 20, 20	208	366.6	316.4	424.7
	Jun 21, 20-Jul 04, 20	200	363.3	311.1	424.2
	Jul 05, 20-Jul 18, 20	155	270.5	228.2	320.6
	Jul 19, 20-Aug 01, 20	116	212.1	172.5	260.9
	Aug 02, 20-Aug 15, 20	114	222.2	179.9	274.5
	Aug 16, 20-Aug 29, 20	127	238.1	195.5	290.0
	Aug 30, 20-Sept 12, 20	117	218.3	177.1	269.0
	Sept 13, 20-Sept 26, 20	98	182.8	145.9	229.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Sept 27, 20-Oct 10, 20	115	225.9	181.8	280.7
	Oct 11, 20-Oct 24, 20	124	242.5	196.2	299.7
	Oct 25, 20-Nov 07, 20	254	462.7	403.6	530.5
	Nov 08, 20-Nov 21, 20	476	855.7	774.5	945.4
	Nov 22, 20-Dec 05, 20	441	823.9	738.2	919.6
	Dec 06, 20-Dec 19, 20	445	815.0	732.3	907.0
	Dec 20, 20-Jan 02, 21	461	872.5	785.6	969.1
	Jan 03, 21-Jan 16, 21	495	862.0	781.4	950.9
	Jan 17, 21-Jan 30, 21	426	785.1	703.8	875.7
	Jan 31, 21-Feb 13, 21	327	608.6	538.4	687.9
	Feb 14, 21-Feb 27, 21	227	388.8	337.8	447.4
	Feb 28, 21-Mar 13, 21	149	266.8	223.5	318.4
	Mar 14, 21-Mar 27, 21	215	367.0	317.9	423.7
	Mar 28, 21-Apr 10, 21	220	389.4	336.4	450.9
	Apr 11, 21-Apr 24, 21	347	586.9	523.1	658.4
	Apr 25, 21-May 08, 21	326	523.2	465.0	588.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 09, 21-May 22, 21	241	419.8	363.5	484.8
	May 23, 21-June 05, 21	153	255.7	214.2	305.3
	June 06, 21-June 19, 21	126	202.0	167.8	243.2
	June 20, 21-July 03, 21	94	163.8	131.1	204.7
	July 04, 21-July 17, 21	178	297.7	252.9	350.3
	July 18, 21-July 31, 21	232	381.8	331.0	440.4
	Aug 01, 21-Aug 14, 21	497	841.0	761.2	929.2
	Aug 15, 21-Aug 28, 21	566	996.7	907.8	1,094.3
	Aug 29, 21-Sept 11, 21	590	1,001.4	915.3	1,095.6
	Sept 12, 21-Sept 25, 21	457	812.9	732.9	901.6
	Sept 26, 21-Oct 09, 21	363	641.2	571.3	719.7
	Oct 10, 21-Oct 23, 21	362	610.1	543.7	684.5
	Oct 24, 21-Nov 06, 21	324	565.9	499.7	640.9
	Nov 07, 21-Nov 20, 21	246	413.8	361.9	473.1
	Nov 21, 21-Dec 04, 21	233	405.9	350.4	470.2
	Dec 05, 21-Dec 18, 21	355	596.1	531.0	669.2

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Multiracial	Dec 19, 21-Jan 01, 22	1,427	2,468.2	2,328.5	2,616.3
	Jan 02, 22-Jan 15, 22	3,361	5,778.6	5,564.4	6,001.1
	Jan 16, 22-Jan 29, 22	1,688	2,975.2	2,817.9	3,141.4
	Jan 30, 22-Feb 12, 22	561	997.3	906.1	1,097.8
	Feb 13, 22-Feb 26, 22	221	416.5	357.0	485.9
	Feb 27, 22-Mar 12, 22	77	139.8	109.5	178.5
	Mar 13, 22-Mar 26, 22	40	70.1	50.0	98.3
	Mar 27, 22-Apr 09, 22	79	139.4	107.8	180.2
	Apr 10, 22-Apr 23, 22	140	264.9	219.2	320.1
	Mar 01, 20-Mar 14, 20	12	8.9	4.7	16.6
	Mar 15, 20-Mar 28, 20	66	32.7	24.9	43.0
	Mar 29, 20-Apr 11, 20	77	35.1	27.1	45.6
	Apr 12, 20-Apr 25, 20	53	27.4	20.1	37.4
	Apr 26, 20-May 09, 20	58	22.9	17.2	30.5
	May 10, 20-May 23, 20	48	20.4	14.9	28.0
	May 24, 20-Jun 06, 20	71	32.8	25.3	42.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jun 07, 20-Jun 20, 20	109	36.6	29.3	45.7
	Jun 21, 20-Jul 04, 20	209	67.4	57.4	79.1
	Jul 05, 20-Jul 18, 20	228	87.5	75.2	101.8
	Jul 19, 20-Aug 01, 20	243	94.3	81.2	109.6
	Aug 02, 20-Aug 15, 20	162	56.5	46.9	68.1
	Aug 16, 20-Aug 29, 20	108	37.2	29.9	46.4
	Aug 30, 20-Sept 12, 20	105	37.0	29.2	46.8
	Sept 13, 20-Sept 26, 20	93	35.9	28.3	45.6
	Sept 27, 20-Oct 10, 20	137	51.8	42.2	63.5
	Oct 11, 20-Oct 24, 20	181	65.2	54.8	77.6
	Oct 25, 20-Nov 07, 20	416	146.3	130.5	164.0
	Nov 08, 20-Nov 21, 20	533	186.9	169.2	206.5
	Nov 22, 20-Dec 05, 20	542	195.0	177.0	214.9
	Dec 06, 20-Dec 19, 20	550	196.2	178.2	216.2
	Dec 20, 20-Jan 02, 21	427	153.5	137.6	171.4
	Jan 03, 21-Jan 16, 21	542	189.0	171.1	208.7

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jan 17, 21-Jan 30, 21	328	114.3	100.2	130.4
	Jan 31, 21-Feb 13, 21	244	82.7	71.1	96.3
	Feb 14, 21-Feb 27, 21	163	56.6	47.0	68.1
	Feb 28, 21-Mar 13, 21	158	56.0	46.5	67.4
	Mar 14, 21-Mar 27, 21	266	92.9	80.5	107.2
	Mar 28, 21-Apr 10, 21	367	111.6	99.2	125.5
	Apr 11, 21-Apr 24, 21	484	152.2	137.2	168.9
	Apr 25, 21-May 08, 21	399	112.3	100.1	126.0
	May 09, 21-May 22, 21	269	74.3	64.6	85.5
	May 23, 21-June 05, 21	172	48.8	40.8	58.2
	June 06, 21-June 19, 21	104	31.4	25.1	39.3
	June 20, 21-July 03, 21	103	31.7	24.8	40.5
	July 04, 21-July 17, 21	170	52.2	43.7	62.4
	July 18, 21-July 31, 21	354	114.3	101.3	129.0
	Aug 01, 21-Aug 14, 21	612	190.3	173.1	209.2
	Aug 15, 21-Aug 28, 21	613	189.5	172.1	208.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Aug 29, 21-Sept 11, 21	646	207.4	188.7	228.0
	Sept 12, 21-Sept 25, 21	646	197.3	179.5	216.9
	Sept 26, 21-Oct 09, 21	571	173.8	157.0	192.4
	Oct 10, 21-Oct 23, 21	564	163.0	147.6	180.0
	Oct 24, 21-Nov 06, 21	445	135.2	120.4	151.8
	Nov 07, 21-Nov 20, 21	443	135.4	121.0	151.6
	Nov 21, 21-Dec 04, 21	377	118.7	105.1	134.2
	Dec 05, 21-Dec 18, 21	558	156.6	141.7	173.1
	Dec 19, 21-Jan 01, 22	620	193.6	176.5	212.4
	Jan 02, 22-Jan 15, 22	1,334	383.3	358.7	409.5
	Jan 16, 22-Jan 29, 22	853	248.7	228.8	270.3
	Jan 30, 22-Feb 12, 22	457	160.3	142.6	180.2
	Feb 13, 22-Feb 26, 22	125	47.6	38.2	59.4
	Feb 27, 22-Mar 12, 22	65	29.2	21.4	39.8
	Mar 13, 22-Mar 26, 22	60	25.1	18.2	34.6
	Mar 27, 22-Apr 09, 22	150	51.5	42.2	62.9

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
AIAN	Apr 10, 22-Apr 23, 22	116	48.4	38.7	60.4
	Mar 01, 20-Mar 14, 20	7	9.0	4.1	20.0
	Mar 15, 20-Mar 28, 20	34	38.0	26.9	53.6
	Mar 29, 20-Apr 11, 20	55	62.0	47.4	81.2
	Apr 12, 20-Apr 25, 20	44	46.0	34.2	61.9
	Apr 26, 20-May 09, 20	78	80.4	64.4	100.5
	May 10, 20-May 23, 20	62	65.6	50.9	84.6
	May 24, 20-Jun 06, 20	99	106.4	87.0	130.2
	Jun 07, 20-Jun 20, 20	113	117.1	97.3	141.0
	Jun 21, 20-Jul 04, 20	113	120.8	100.0	145.8
	Jul 05, 20-Jul 18, 20	107	114.9	94.5	139.7
	Jul 19, 20-Aug 01, 20	162	170.5	145.6	199.5
	Aug 02, 20-Aug 15, 20	126	138.8	115.7	166.5
	Aug 16, 20-Aug 29, 20	80	83.4	66.7	104.2
	Aug 30, 20-Sept 12, 20	60	65.0	50.1	84.5
	Sept 13, 20-Sept 26, 20	66	67.4	52.9	85.9

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Sept 27, 20-Oct 10, 20	72	74.6	59.1	94.1
	Oct 11, 20-Oct 24, 20	63	67.1	52.0	86.6
	Oct 25, 20-Nov 07, 20	135	142.3	119.8	168.9
	Nov 08, 20-Nov 21, 20	312	334.5	298.6	374.8
	Nov 22, 20-Dec 05, 20	464	487.4	444.3	534.6
	Dec 06, 20-Dec 19, 20	467	494.8	451.2	542.7
	Dec 20, 20-Jan 02, 21	373	396.3	357.4	439.5
	Jan 03, 21-Jan 16, 21	402	414.9	376.0	457.9
	Jan 17, 21-Jan 30, 21	294	306.1	272.5	343.9
	Jan 31, 21-Feb 13, 21	250	258.9	228.4	293.6
	Feb 14, 21-Feb 27, 21	167	170.7	146.5	199.0
	Feb 28, 21-Mar 13, 21	169	170.1	146.2	197.9
	Mar 14, 21-Mar 27, 21	172	173.3	149.2	201.4
	Mar 28, 21-Apr 10, 21	202	208.2	180.9	239.6
	Apr 11, 21-Apr 24, 21	262	266.3	235.6	301.0
	Apr 25, 21-May 08, 21	213	218.7	190.9	250.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 09, 21-May 22, 21	192	194.9	169.0	224.9
	May 23, 21-June 05, 21	108	108.0	89.4	130.5
	June 06, 21-June 19, 21	84	87.1	70.1	108.3
	June 20, 21-July 03, 21	55	58.8	44.7	77.3
	July 04, 21-July 17, 21	75	76.6	60.8	96.4
	July 18, 21-July 31, 21	249	257.2	226.8	291.7
	Aug 01, 21-Aug 14, 21	453	468.2	426.5	514.0
	Aug 15, 21-Aug 28, 21	619	643.1	593.7	696.6
	Aug 29, 21-Sept 11, 21	630	656.3	606.1	710.5
	Sept 12, 21-Sept 25, 21	555	575.7	528.8	626.7
	Sept 26, 21-Oct 09, 21	498	513.8	469.9	561.8
	Oct 10, 21-Oct 23, 21	439	454.6	413.5	499.9
	Oct 24, 21-Nov 06, 21	347	357.6	321.4	397.9
	Nov 07, 21-Nov 20, 21	247	252.8	222.5	287.1
	Nov 21, 21-Dec 04, 21	234	241.9	212.5	275.5
	Dec 05, 21-Dec 18, 21	235	243.6	213.9	277.4

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Dec 19, 21-Jan 01, 22	721	744.0	690.9	801.2
	Jan 02, 22-Jan 15, 22	2,306	2,377.7	2,281.1	2,478.4
	Jan 16, 22-Jan 29, 22	1,713	1,754.1	1,672.0	1,840.2
	Jan 30, 22-Feb 12, 22	802	842.4	784.7	904.3
	Feb 13, 22-Feb 26, 22	257	275.1	242.4	312.1
	Feb 27, 22-Mar 12, 22	107	114.4	94.0	139.3
	Mar 13, 22-Mar 26, 22	82	87.9	70.4	109.8
	Mar 27, 22-Apr 09, 22	90	89.0	72.4	109.6
	Apr 10, 22-Apr 23, 22	161	167.6	143.2	196.1

Source: Washington Disease Reporting System (WDRS)

Cumulative crude confirmed or probable case counts and percentages by language spoken

Analysis of language spoken provides another important method to understand health disparities and communities impacted by COVID-19. Use of one method alone may mask health disparities and community-specific impacts. Almost half of reported confirmed or probable cases are missing information on primary language. Despite missing data, there are some important observations.

The following table presents counts and percentages of confirmed or probable cases, by primary language spoken. The percentage of the Washington state population 5 years and over with limited English proficiency that speak each language are also included to provide context. The information on the percentage of the Washington state population with limited English proficiency come from the Office of Financial Management 2016 estimates. Findings should be interpreted with caution due to the high proportion of missing data (75%).

Table 4. Confirmed or probable COVID-19 case count and percentage of cases by primary language spoken

Language	Case Count	% of Cases	% of WA Population with Limited English Proficiency*
All Cases	1,505,399	100.0%	
Unknown Language	1,135,265	75.4%	
Known Language	370,134	24.6%	
English	321,496	86.9*%	
Spanish	41,173	11.1*%	6.4
Marshallese	353	0.1*%	0.1
Vietnamese	1,301	0.4*%	0.5
Russian	1,758	0.5*%	0.3
Chinese (all)	474	0.1*%	0.3
Ukrainian	311	0.1*%	0.2
Somali	363	0.1*%	0.1
Tagalog	182	0.0*%	0.1
Amharic	205	0.1*%	0.1
Other	2,518	0.7*%	

*For more information on the selected WA populations by primary language reported here, please see the WA OFM methodology, https://ofm.wa.gov/sites/default/files/public/legacy/pop/subject/ofm_pop_limited_english_proficiency_methodology.pdf

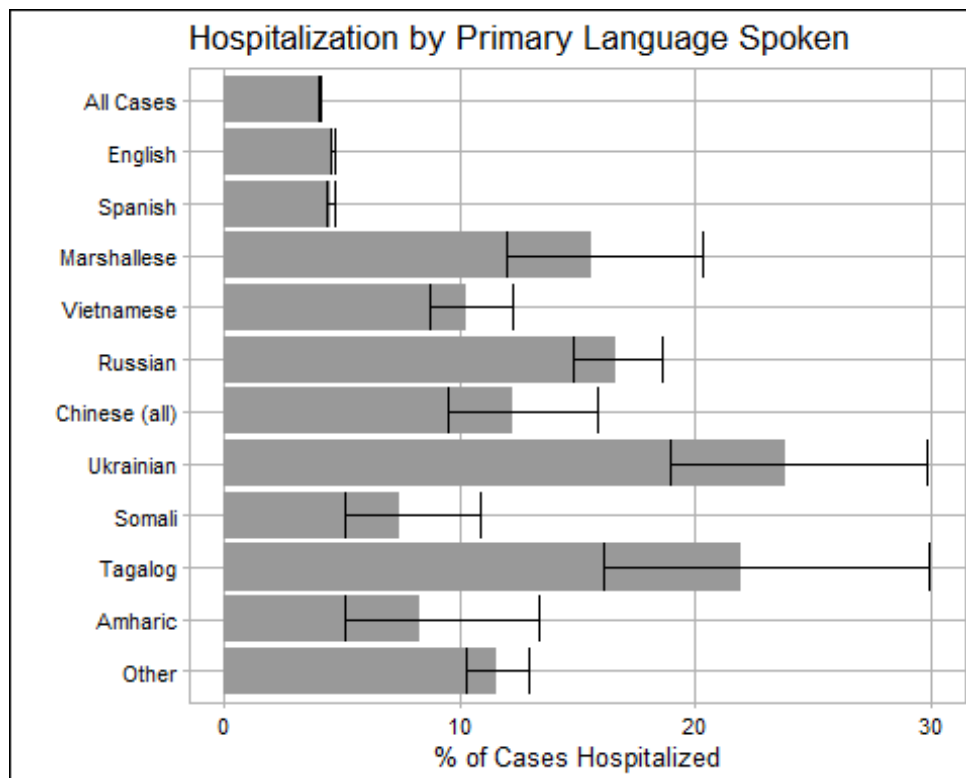
Cumulative hospitalization percentages among confirmed or probable COVID-19 cases by language spoken

The following table and graph present the percentages of confirmed or probable cases who were hospitalized, by primary language spoken. The high rates of hospitalizations among confirmed or probable cases whose primary language was other than English or Spanish suggests that increased exposures and/or barriers to care may contribute to more severe disease in these populations. Languages with less than 10 individuals hospitalized were

removed from this analysis to protect patient confidentiality. Findings should be interpreted with caution due to the high proportion of missing data (75%).

Table 5: Percentages of confirmed or probable COVID-19 cases hospitalized by primary language spoken

Language	Case Count	Hospitalization Count	% language specific cases hospitalized
All Cases	1,505,399	60,527	4%
English	321,496	14,854	4.6%
Spanish	41,173	1,857	4.5%
Marshallese	353	55	15.6%
Vietnamese	1,301	134	10.3%
Russian	1,758	292	16.6%
Chinese (all)	474	58	12.2%
Ukrainian	311	74	23.8%
Somali	363	27	7.4%
Tagalog	182	40	22%
Amharic	205	17	8.3%
Other	2,518	291	11.6%



Washington State Department of
Health